

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for managing traffic on a switching system comprising:
 - receiving a service request from an end point, said end point being one of a plurality of communications endpoints on a communications system, said plurality of endpoints being connected to each other through a network of routers, each said service requests passing through at least one of said routers to a server;
 - determining a system traffic level responsive to receiving said service request, said system traffic level being determined by said server and indicating the current load level of system traffic across said communications system;
 - correlating the determined system traffic level with a predetermined level of available service functionality; and
 - establishing an available services list, wherein said communications system is a telecommunications system including a plurality of telecommunications end points selectively communicating with each other, said method further comprising
said server creating a correlation table comprising data fields including an upper traffic level limit and a lower traffic level limit and a list of services provided to an end point when the determined traffic level falls within the upper and lower traffic limits.
2. (previously presented) The method of claim 1, further comprising:
 - determining whether the service request is one of the available services on said available services list;
 - generating a service availability message for the requested service; and
 - transmitting the service availability message to the requesting end point.

3. (previously presented) The method of claim 1, wherein the system traffic determination comprises periodically sending router load requests to said routers and measuring system traffic responsive to router traffic loads and providing said system traffic measurement responsive to receiving said service request.
4. (canceled)
5. (previously presented) The method of claim 2, wherein the system traffic may include traffic from point to point connections and conference connections between said end point and one or more other end points of said plurality of communications end points and determining the system traffic level is initiated upon receipt of the service request.
6. (canceled)
7. (currently amended) The method of claim 1 [[6]], wherein the correlation table provides weighted services availability.
8. (currently amended) The method of claim 1 [[6]], wherein each of said plurality of telecommunications end points includes a communications device and the correlation table includes weighted services that are distributed according to a service class determined by the amount of bandwidth necessary to implement a service.
9. (previously presented) The method of claim 8, wherein the service class includes voice-based communication services, the voice-based communication services including traffic point to point voice calls and teleconferences.
10. (previously presented) The method of claim 8, wherein the service class includes video-based communication services, the video-based communication services including traffic point to point video calls and video conferences.
11. (original) The method of claim 2, wherein the service availability message notifies the end point that the requested service is available based on the traffic level determination.

12. (previously presented) The method of claim 2, wherein the service availability message notifies the end point that the requested service is unavailable based on the traffic level determination.
13. (original) The method of claim 12, wherein when the service is unavailable, the end point informs a user that the requested service is temporarily unavailable.
14. (previously presented) The method of claim 12, wherein when the service is unavailable, said server creates an entry on a negative request queue corresponding to the service request.
15. (previously presented) The method of claim 14, wherein the entry on the negative request queue includes a field identifying the service requesting end point.
16. (original) The method of claim 14, wherein the entry on the negative request queue includes a field indicating the type of service requested.
17. (previously presented) The method of claim 14, further comprising transmitting a status update message from the server to the end point when the requested service becomes available.
18. (canceled)
19. (original) The method of claim 2, further comprising the requesting end point establishing a connection through the switching system to provide a user with the service requested.
20. (currently amended) A method for conducting traffic management on a network comprising:
 - creating in a communications network server a current list of available system service, said current list listing system services available to communications network end points;
 - updating the list of available system services based on a network traffic measurement and network performance parameters associated with system services, said measurement measuring the current level of traffic on a communications network of a plurality of said communications end points connected to a network of routers, each selectively communicating with each other through at least one of said routers;

creating a correlation table comprising data fields including an upper traffic level limit and a lower traffic level limit and a list of services provided to an end point when the determined traffic level falls within the upper and lower traffic limits; and

selectively suppressing network device service requests received by said communications network server through one of said routers based on whether a requested service corresponds to an entry on the current list of available system services.

21. (previously presented) The method of claim 20, wherein a network end point transmits the network device service request to said one router.
22. (previously presented) The method of claim 20, wherein a network end point receives a service availability message through a connected router from a communications network server indicating whether the requested service will be provided.
23. (previously presented) The method of claim 22, wherein when the network end point receives a service availability message through said connected router indicating the requested service will not be provided, the network end point receives a second message through said connected router when the requested service becomes available from said communications network server.
24. (previously presented) The method of claim 20, wherein said communications network is a telecommunications network and the network performance parameters include a list of system defined services and associated bandwidth capacity levels.
25. (currently amended) An apparatus for managing traffic on a switching system comprising:
 - receiving means for receiving a service request from a router connected to a requesting end point, said requesting end point being one of a plurality of communications endpoints on a communications system, said plurality of communications endpoints being connected to each other through a network of routers, each said service requests passing through at least one of said routers;
 - traffic determining means for determining the level of system traffic across said communications system at a given time;

correlation means for correlating the determined traffic level with a predetermined level of available service functionality; and

establishing means for establishing an available services list for said requesting end point, wherein said switching system is in a telecommunications system including a plurality of telecommunications end points selectively communicating with each other, said apparatus further comprising

means for creating a correlation table comprising data fields including an upper traffic level limit and a lower traffic level limit and a list of services provided to an end point when the determined traffic level falls within the upper and lower traffic limits.

26. (previously presented) The apparatus of claim 25, further comprising:

available services determining means for determining whether the service request is one of the available services on said available services list;

generating means for generating a service availability message for the requested service.

27. (previously presented) The apparatus of claim 26, wherein said communications system is a telecommunications system, said apparatus further comprising:

transmitting means for transmitting the service availability message to said router connected to the requesting end point.

28. (previously presented) The apparatus of claim 27, wherein the service availability message notifies the end point that the requested service is unavailable, said apparatus creates an entry on a negative request queue corresponding to the service request; and notifies the end point through said router when the requested service becomes available.

29. (currently amended) An apparatus for conducting traffic management on a network comprising:

receiving means for receiving a service request from a router connected to a requesting end point, wherein said network is in a telecommunications network, said requesting end point being one of a plurality of telecommunications endpoints on said [[a]] telecommunications

network, said plurality of telecommunications endpoints being connected to each other through a network of routers, each said service requests passing through at least one of said routers;

creating means for creating a list of available system services for said plurality of telecommunications end points, said creating means creating a correlation table comprising data fields including an upper traffic level limit and a lower traffic level limit and a list of services provided to an end point when the determined traffic level falls within the upper and lower traffic limits;

updating means for updating the list of available system services and the correlation table based on a network traffic measurement of the network traffic load at a given time and network performance parameters associated with system services; and

suppressing means for selectively suppressing network device service requests based on whether the requested service corresponds to an entry on the list of available system services.

30. (previously presented) The apparatus of claim 29, wherein the updated list of available services indicates which services are available to for said plurality of telecommunications end points based on the network traffic measurement, the apparatus further comprising:

transmitting means for transmitting a first message through one of said routers to a requesting network telecommunications device that the requested service should be suppressed; and

said transmitting means subsequently transmits a second message through said one router to the network telecommunications device when the requested service becomes available.

31. (new) A method for managing traffic on a switching system comprising:

receiving a service request from an end point, said end point being one of a plurality of communications endpoints on a communications system, said plurality of endpoints being connected to each other through a network of routers, each said service requests passing through at least one of said routers to a server;

determining a system traffic level responsive to receiving said service request, said system traffic level being determined by said server and indicating the current load level of system traffic across said communications system;

correlating the determined system traffic level with a predetermined level of available service functionality;

establishing an available services list;

determining whether the service request is one of the available services on said available services list;

generating a service availability message for the requested service; and

transmitting the service availability message to the requesting end point, wherein the service availability message notifies the end point that the requested service is unavailable based on the traffic level determination; and when the service availability message notifies the end point that the requested service is unavailable,

forwarding the service request to a second end point when the requested service becomes available.